

REMARKS

Applicant respectfully requests reconsideration in view of the foregoing amendment and these remarks.

Section 103 Rejections

All of the pending claims are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0106529 ("Okunaka") alone or in view of U.S. Publication No. 2002/01097511 ("D'Andrade"). Applicant respectfully disagrees.

Claim 1

Claim 1 is directed to an organic electronic device. The device includes a plurality of organic layers, wherein each organic layer is in a deposition region on a deposition surface and a first portion of at least one of the organic layers is cross-linked so that the first portion is insoluble in an organic solution. The plurality of organic layers includes a hole transport layer, an emissive layer on the hole transport layer, an electron transport layer on the emissive layer and an electron injection layer on the electron transport layer.

Okunaka describes a device with an anode layer 2, a hole transport layer 5, a photoemissive layer 3, an electron transport layer 6, a buffer layer 8 and a cathode layer 4, in that order (FIG. 7, paragraphs 134-141). The cathodes are formed of a magnesium-silver alloy or an aluminum-lithium alloy (paragraph 134).

The Examiner has argued that "The cathode electrode layer reads upon the 'electron injection layer' of claim 1 (see par. 137)" (page 3 of the office action). However, applicant's electron injection layer is an organic layer ("the plurality of organic layers includes . . . an electron injection layer"). Therefore, applicant's claimed electron injection layer does not read on Okunaka's cathode. Okunaka does not describe the buffer layer as acting as a electron injection layer. For at least these reasons, applicant submits that there is no *prima facie* case of obviousness with respect to claim 1 or the claims that depend therefrom.

The Examiner also argues that "Okunaka . . . does not specifically teach both an electron injecting layer and an electron injecting electrode (cathode)D'Andrade et al. teaches . . . that a cathode may be comprised of a bi-layer including LiF and Al" (page 5 of the office action). Applicant notes that neither LiF or Al are organic materials and thus, an organic electron injection layer does not read on a portion of a bi-layer that includes LiF and Al.

Claim 26

Claim 26 is directed to an organic device with at least one cross-linking agent that adds functionality to a first portion that the first portion does not have without the cross-linking agent and the cross-linking agent adds the functionality in addition to cross-linking the first portion and the functionality added by the cross-linking agent is one of hole transport, electron transport, electron injection, hole blocking, optical confinement or waveguiding.

Okunaka describes a polymer binder with a fluorescent group and/or a carrier transport group in the molecule (paragraph 90). This functional binder can also include a photo-crosslinkable hole-transporting high polymers or photo-crosslinkable electron-transporting high polymer. When the binder polymer does not have the photo-crosslinkable group, it can have a photo-crosslinking agent (paragraph 94). If too much photo-crosslinking agent is added to the material, insufficient photo-emission or carrier transport performance may result (paragraph 95).

While Okunaka describes materials that are cross-linked, have fluorescent groups and a photo-crosslinkable hole-transporting high polymer or photo-crosslinkable electron-transporting high polymer, Okunaka fails to suggest or disclose a cross-linking agent that adds functionality to a first portion that is in addition to cross-linking and that the first portion does not have without the cross-linking agent. Rather, Okunaka describes other groups in a layer that provide functions, but the groups that provide the functions are not described as cross-linking agents. Nor are the agents described as adding any functionality to the polymer other cross-linking. In fact, Okunaka suggests that if too much photo-crosslinking agent is added to a mixture, the layer may have reduced photo-emission or carrier transport abilities, rather than increased functionality.

For at least these reasons, applicant submits that there is no *prima facie* case of obviousness with respect to claim 26 and the claims that depend therefrom.

New Claim

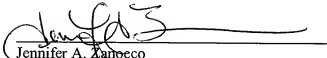
Claim 52 is new and depends from claim 1. The same reasons as presented above with respect to claim 1 apply to claim 52.

The three-month extension of time fee in the amount of \$1110 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date:

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